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БОЛОНСКАЯ СИСТЕМА ОБРАЗОВАНИЯ: ПРЕДВАРИТЕЛЬНЫЕ РЕЗУЛЬТАТЫ

Анализируются предварительные результаты в системе высшего образования после принятия Болонской декларации. С 19 июня 1999 года к сегодняшнему дню 47 стран подписали Болонскую декларацию. В центре исследования 27 европейских стран, к данным которых имеется доступ в Евростате. Были проанализированы следующие показатели: уровень высшего образования, студенты в системе высшего образования, продолжительность среднего школьного образования, уровень занятости выпускников вузов, мобильность студентов в Европе, государственные и частные траты на образование на протяжении всей жизни. Согласно принципам Болонского соглашения (декларации) период обучения должен быть сокращен, а качество компетентности выпускников повышено. В соответствии с этими принципами также должна повыситься мобильность студентов и их трудоустройство. С другой стороны, период обучения студентов должен быть сокращен за последующие несколько лет.

Ключевые слова: Болонская декларация, высшее образование, показатели, ЕС.

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BOLOGNA EDUCATION SYSTEM: PRELIMINARY RESULTS

We analyze preliminary results in tertiary education after applying the Bologna Declaration. From June 19. 1999 until today, 47 countries signed Bologna Declaration. The focus of our research was 27 European countries, which data are available at Eurostat. We analyzed next indicators: tertiary educational attainment, students in tertiary education, school expectancy, employment rates of recent graduates, mobility of students in Europe, public and private expenditure on education and lifelong learning. By the main principles of Bologna Declaration, the process of studies should be shortened while the quality of graduates should be higher. Taking into account the other principles of the Declaration, the mobility of students in Europe should rise during years as also, employment rates of recent graduates. From others side, the process of studies should be shorter during last several years.

Key words: Bologna Declaration, tertiary education, indicators, EU.

1. Introduction

With the introduction of the Bologna process, most European Union countries harmonize its system of tertiary education. The key issue in this process is to improve the quality of studies, which will be harmonized in all countries of the European Union. The Bologna Process has achieved remarkable results over its first decade, driving positive change in European higher education. EU countries have made significant changes that have enabled the European Higher Education Area to emerge and which have laid the ground for higher education that is serving an increasing range of societal demands; higher education structures have been modified, quality assurance systems developed, mechanisms to facilitate mobility established, and a range of issues for the social dimension of higher education identified (Education, Audiovisual and Culture Executive Agency, 2012). Our plan in this paper is to analyze the preliminary results of tertiary education indicators after the application of the Bologna Declaration. The aim of the analysis is to determine whether the declaration made expected results. The Bologna process has created the basis for a common European educational framework, harmonizing European higher education systems (Millberget al., 2011) and creating convergence in terms of academic awards, curriculum structure and competencies (Davies, 2008). Our aim is to analyze the preliminary results and through the method of comparisons make conclusions.

2. Materials and methods

In our paper we analyze the average of the 27 EU Member States: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Greece, Spain, France, Ireland, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Hungary, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovak Republic, Finland, Sweden and United Kingdom. The Bologna process initiated in 1999, but in this paper we use data from the year 2000. Even though we cannot find data for all indicators before 1999, we believe that the process of the Bologna Declaration is not initiated immediately in many countries and therefore this was not high limitation of analysis. Prior to the analysis, it is necessary to explain the indicators of education for these countries. These indicators show different categories that affect the process of tertiary education in the EU countries.

As a limitation of this analysis, we can state that we do not use regression, correlation or other statistical indicator which show the existence of quantitative stacking, as well as the strength of the stacking between variables or dependency of connections (Vukovic, 2013a). As methods we

only use general method of comparison, on the basis of which we found certain similarities and differences factors research subject (Vukovic, 2013b). The calculation, values and explanation of all indicators is adopted from Eurostat (2016):

- Tertiary educational attainment (age group 30-34) is defined as the percentage of the population aged 30-34 who have successfully completed tertiary studies (e.g. university, higher technical institution, etc.).

- Public expenditure on education is defined as total public expenditure on education, expressed as a percentage of GDP. Generally, the public sector funds education either by bearing directly the current and capital expenses of educational institutions or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private firms or non-profit organizations. Both types of transactions together are reported as total public expenditure on education.

- Expenditure on educational institutions from private sources comprises school fees; materials such as textbooks and teaching equipment; transport to school (if organised by the school); meals (if provided by the school); boarding fees; and expenditure by employers on initial vocational training.

- School expectancy corresponds to the expected years of education over a lifetime and has been calculated adding the single-year enrolment rates for all ages.

- The indicator 'employment rates of recent graduates' presents the employment rates of persons aged 20 to 34 fulfilling the following conditions: first, being employed according to the ILO definition, second, having attained at least upper secondary education (ISCED 3) as the highest level of education, third, not having received any education or training in the four weeks preceding the survey and four, having successfully completed their highest educational attainment 1, 2 or 3 years before the survey.

- Mobility of students in Europe presents the incoming students and outgoing students for each country, using the figures provided by the host country on foreign students enrolled in tertiary education by nationality.

- Lifelong learning refers to persons aged 25 to 64 who stated that they received education or training in the four weeks preceding the survey (numerator).

3. Results, discussion and conclusion

We supposed that implementation of the Bologna Declaration in EU 27 countries gave good results in the educational process. This means that

the values of indicators Tertiary educational attainment, Employment rates of recent graduates and Mobility of students in Europe should rise during the observed period. On the other hand, the values of the indicators Public expenditure on education, Private expenditure on education, School expectancy and Lifelong learning should decrease during the observed period. However, the preliminary analysis did not have such results.

Table 1. Education indicators in the EU 27 for the period 2000-2014

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Indicators															
Tertiary educational attainment, age group 30-34 (in %)	22.4	22.8	23.6	25.1	27	28.2	29.1	30.2	31.3	32.4	33.9	34.9	36.1	37.2	38
Public expenditure on education (% of GDP)	4.91	4.99	5	5.04	4.95	4.92	4.91	4.93	5.04	5.38	5.41	5.25	n/a	n/a	n/a
Private expenditure on education (% of GDP)	0.56	0.6	0.6	0.64	0.65	0.68	0.65	0.71	0.73	0.79	0.8	0.74	n/a	n/a	n/a
School expectancy (in years)	n/a	16.8	17.1	17	17.2	17.4	17	17.2	17.3	17.4	17.5	17.6	17.6	n/a	n/a
Employment rates of recent graduates (in %)	n/a	n/a	n/a	76.7	75.6	76.6	79	80.9	82	78.3	77.5	77.2	76	75.6	76.1
Mobility of students in Europe (in numbers)	n/a	340.5	345.8	372.2	390.5	403.5	458	487.9	496.2	532.4	578	535.8	653.7	n/a	n/a
Lifelong learning (in %)	7.1	7.1	7.2	8.5	9.2	9.6	9.5	9.3	9.4	9.3	9.2	8.9	9.1	10.6	10.7

Source: <http://ec.europa.eu/eurostat/documents/>

According to the data from Table 1, all the analyzed indicators have achieved growth in the period 2000-2014. This means that applying the Bologna Declaration has increased the percentage of the population aged 30-34 who have successfully completed tertiary studies, as also mobility of students in Europe. This supports the objectives of the Declaration to increase the mobility of studies among different countries of the European Union, through harmonization of systems studies. Also, we noticed that there is an increasing number of population aged 30-34 who have successfully completed tertiary studies. The same table shows that lifelong learning, expected years of education over a lifetime and public and private expenditure on education increased during the same period. If milder increase

in public and private expenditures attributable to the strengthening of the economic power of states and citizens of standards (which may be a positive effect of the Declaration), then increasing lifelong learning and expected years of education over a lifetime the unexpected negative consequence.

We could conclude that Bologna process provided a unique system of tertiary education in Europe. Without a doubt, students can changed and continue their studies in different EU countries. However, the Bologna system is not affected on employment rates of recent graduates. Moreover, school expectancy and lifelong learning increased, instead of reducing.

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